

## SEQUENCE LISTING

<110> COMMISSARIAT A L'ENERGIE ATOMIQUE  
UNIVERSITE PIERRE ET MARIE CURIE (PARIS VI)

<120> PEPTIDES HAVING AN AFFINITY FOR A PHOSPHOLIPID AND  
USES

<130> B14001.3EE

<140> PCT/FR03/02025

<141> 2003-06-30

<150> FR N°02 08202

<151> 2002-07-01

<160> 14

<170> PatentIn Ver. 2.1

<210> 1

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 1

Gly Phe Asp Glu Arg Ala Asp Val Glu Thr Leu Arg Lys Ala Met Lys  
1 5 10 15

Gly Leu Gly Thr Asp Glu Glu Ser Ile Leu Thr Leu Leu Thr Ser Arg  
20 25 30

Ser Asn Ala Gln Arg Gln Glu Ile Ser Ala Ala Tyr Lys Thr Leu Phe  
35 40 45

Gly Arg Asp Leu Leu Asp Asp Leu Lys Ser Glu Leu Thr Gly Lys Phe  
50 55 60

Glu Lys Leu Val Val Ala Leu Leu Lys Pro Ser  
65 70 75

<210> 2

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 2

Asn Phe Asp Ala Glu Arg Asp Ala Leu Asn Ile Arg Lys Ala Ile Lys  
1 5 10 15

Gly Met Gly Val Asp Glu Asp Thr Ile Val Asn Ile Leu Thr Asn Arg  
20 25 30

· Ser Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala Tyr Gln Arg Arg Thr  
35 40 45  
Lys Arg Glu Leu Ala Ser Asp Leu Lys Ser Glu Leu Ser Gly His Leu  
50 55 60  
Glu Arg Val Ile Leu Gly Leu Leu Lys Thr Ser  
65 70 75

<210> 3  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 3  
Asp Phe Ser Pro Ser Val Asp Ala Glu Ala Ile Arg Lys Ala Ile Lys  
1 5 10 15  
Gly Ile Gly Thr Asp Glu Asp Met Leu Ile Ser Ile Leu Thr Glu Arg  
20 25 30  
Ser Asn Ala Gln Arg Gln Leu Ile Val Lys Glu Tyr Gln Ala Ala Tyr  
35 40 45  
Gly Arg Glu Leu Lys Asp Asp Leu Lys Ser Glu Leu Ser Gly His Phe  
50 55 60  
Glu Arg Leu Met Val Ala Leu Val Thr Pro Ser  
65 70 75

<210> 4  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 4  
Gly Phe Asn Ala Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met Lys  
1 5 10 15  
Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr Arg  
20 25 30  
Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala Tyr Lys Ser Thr Ile  
35 40 45  
Gly Arg Asp Leu Ile Asp Asp Leu Lys Ser Glu Leu Ser Gly Asn Phe  
50 55 60  
Glu Arg Val Ile Val Gly Met Met Thr Pro Ser  
65 70 75

<210> 5  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 5  
Gly Phe Asp Pro Asn Gln Asp Ala Glu Ala Leu Arg Thr Ala Met Lys  
1 5 10 15

Gly Phe Gly Ser Asp Glu Glu Ala Ile Leu Asp Ile Ile Thr Ser Arg  
20 25 30

Ser Asn Arg Gln Arg Gln Glu Val Cys Gln Ser Tyr Lys Ser Leu Tyr  
35 40 45

Gly Arg Asp Leu Ile Ala Asp Leu Lys Ser Glu Leu Thr Gly Lys Phe  
50 55 60

Glu Arg Leu Ile Val Gly Leu Met Arg Pro Ser  
65 70 75

<210> 6  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 6  
Gly Phe Asn Pro Asp Ala Asp Ala Lys Ala Leu Arg Lys Ala Met Lys  
1 5 10 15

Gly Leu Gly Thr Asp Glu Asp Thr Ile Ile Asp Ile Ile Thr His Arg  
20 25 30

Ser Asn Val Gln Arg Gln Gln Ile Arg Gln Thr Phe Lys Ser His Phe  
35 40 45

Gly Arg Asp Leu Met Thr Asp Leu Lys Ser Glu Ile Ser Gly Asp Leu  
50 55 60

Glu Arg Leu Ile Leu Gly Leu Met Met Pro Ser  
65 70 75

<210> 7  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence

derived from a human annexin

<400> 7  
Pro Gly Asp Ala Ile Arg Asp Ala Glu Ile Leu Arg Lys Ala Met Lys  
1 5 10 15  
  
Gly Phe Gly Thr Asp Glu Gln Ala Ile Val Asp Val Val Ala Asn Arg  
20 25 30  
  
Ser Asn Asp Gln Arg Gln Lys Ile Lys Ala Ala Phe Lys Thr Ser Tyr  
35 40 45  
  
Gly Arg Asp Leu Ile Lys Asp Leu Lys Ser Glu Leu Ser Gly Asn Met  
50 55 60  
  
Glu Arg Leu Ile Leu Ala Leu Phe Met Pro Ser  
65 70 75

<210> 8  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 8  
His Phe Asn Pro Asp Pro Asp Val Glu Thr Leu Arg Lys Ala Met Lys  
1 5 10 15  
  
Gly Ile Gly Thr Asn Glu Gln Ala Ile Ile Asp Val Leu Thr Lys Arg  
20 25 30  
  
Ser Asn Thr Gln Arg Gln Thr Ile Ala Lys Ser Phe Lys Ala Gln Phe  
35 40 45  
  
Gly Arg Asp Leu Thr Glu Asp Leu Lys Ser Glu Leu Ser Gly Lys Leu  
50 55 60  
  
Glu Arg Leu Ile Val Ala Leu Met Tyr Pro Ser  
65 70 75

<210> 9  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 9  
Gly Phe Asp Pro Leu Arg Asp Ala Glu Val Leu Arg Lys Ala Met Lys  
1 5 10 15  
  
Gly Phe Gly Thr Asp Glu Gln Ala Ile Ile Asp Cys Leu Gly Ser Arg  
20 25 30

Ser Asn Lys Gln Arg Gln Gln Ile Leu Leu Ser Phe Lys Thr Ala Tyr  
35 40 45

Gly Arg Asp Leu Ile Lys Asp Leu Lys Ser Glu Leu Ser Gly Asn Phe  
50 55 60

Glu Lys Thr Ile Leu Ala Leu Met Lys Thr Ser  
65 70 75

<210> 10  
<211> 75  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 10  
Gly Phe Asp Val Asp Arg Asp Ala Lys Lys Leu Arg Lys Ala Met Lys  
1 5 10 15

Gly Met Gly Thr Asn Glu Ala Ala Ile Ile Glu Ile Leu Ser Gly Arg  
20 25 30

Thr Ser Asp Glu Arg Gln Gln Ile Lys Gln Lys Tyr Lys Ala Thr Tyr  
35 40 45

Gly Arg Glu Leu Glu Glu Asp Leu Lys Ser Glu Leu Ser Gly Asn Phe  
50 55 60

Glu Lys Thr Ala Leu Ala Leu Leu Asp Arg Ser  
65 70 75

<210> 11  
<211> 79  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<220>  
<223> Xaa of position 22 is Leu, Met or Trp

<220>  
<223> Xaa of position 34 is Thr or Lys

<220>  
<223> Xaa of position 45 is Ser or Lys

<220>  
<223> Xaa of position 48 is Phe or Tyr

<220>  
<223> Xaa of position 50 is Thr or Glu

<220>

<223> Xaa of position 63 is Glu or Lys

<220>

<223> Xaa of position 69 is Glu or Lys

<220>

<223> Xaa of position 71 is Glu or Leu

<400> 11

Gly Ser Gly Cys Gly Phe Asp Glu Arg Ala Asp Val Glu Thr Leu Arg  
1 5 10 15

Lys Ala Met Lys Gly Xaa Gly Thr Asp Glu Glu Ser Ile Leu Thr Leu  
20 25 30

Leu Xaa Ser Arg Ser Asn Ala Gln Arg Gln Glu Ile Xaa Ala Ala Xaa  
35 40 45

Lys Xaa Leu Phe Gly Arg Asp Leu Leu Asp Asp Leu Lys Ser Xaa Leu  
50 55 60

Thr Gly Lys Phe Xaa Lys Xaa Val Val Ala Leu Leu Lys Pro Ser  
65 70 75

<210> 12

<211> 78

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<400> 12

Gly Ser Pro Gly Phe Asp Glu Arg Ala Asp Val Glu Thr Leu Arg Lys  
1 5 10 15

Ala Met Lys Gly Leu Gly Thr Asp Glu Glu Ser Ile Leu Thr Leu Leu  
20 25 30

Thr Ser Arg Ser Asn Ala Gln Arg Gln Glu Ile Ser Ala Ala Tyr Lys  
35 40 45

Thr Leu Phe Gly Arg Asp Leu Leu Asp Asp Leu Lys Ser Glu Leu Thr  
50 55 60

Gly Lys Phe Glu Lys Leu Val Val Ala Leu Leu Lys Pro Ser  
65 70 75

<210> 13

<211> 83

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<220>  
<223> Xaa of position 25 is Leu, Met or Trp

<220>  
<223> Xaa of position 37 is Thr or Lys

<220>  
<223> Xaa of position 48 is Ser or Lys

<220>  
<223> Xaa of position 51 is Phe or Tyr

<220>  
<223> Xaa of position 53 is Thr or Glu

<220>  
<223> Xaa of position 66 is Glu or Lys

<220>  
<223> Xaa of position 72 is Glu or Lys

<220>  
<223> Xaa of position 74 is Glu or Leu

<400> 13  
Gly Ser Glu Cys Asp Phe Pro Gly Phe Asp Glu Arg Ala Asp Val Glu  
1 5 10 15

Thr Leu Arg Lys Ala Met Lys Gly Xaa Gly Thr Asp Glu Glu Ser Ile  
20 25 30

Leu Thr Leu Leu Xaa Ser Arg Ser Asn Ala Gln Arg Gln Glu Ile Xaa  
35 40 45

Ala Ala Xaa Lys Xaa Leu Phe Gly Arg Asp Leu Leu Asp Asp Leu Lys  
50 55 60

Ser Xaa Leu Thr Gly Lys Phe Xaa Lys Xaa Val Val Ala Leu Leu Lys  
65 70 75 80

Pro Ser Arg

<210> 14  
<211> 87  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: sequence  
derived from a human annexin

<220>  
<223> Xaa of position 29 is Leu, Met or Trp

<220>  
<223> Xaa of position 41 is Tyr or Lys

<220>  
<223> Xaa of position 52 is Ser or Lys

> <220>  
> <223> Xaa of position 55 is Phe or Tyr  
  
<220>  
<223> Xaa of position 57 is Thr or Glu  
  
<220>  
<223> Xaa of position 70 is Glu or Lys  
  
<220>  
<223> Xaa of position 76 is Glu or Lys  
  
<220>  
<223> Xaa of position 78 is Glu or Leu  
  
<400> 14  
Gly Ser Gly Cys Gly Thr Glu Thr Asp Phe Pro Gly Phe Asp Glu Arg  
1 5 10 15  
  
Ala Asp Val Glu Thr Leu Arg Lys Ala Met Lys Gly Xaa Gly Thr Asp  
20 25 30  
  
Glu Glu Ser Ile Leu Thr Leu Leu Xaa Ser Arg Ser Asn Ala Gln Arg  
35 40 45  
  
> Gln Glu Ile Xaa Ala Ala Xaa Lys Xaa Leu Phe Gly Arg Asp Leu Leu  
50 55 60  
  
> Asp Asp Leu Lys Ser Xaa Leu Thr Gly Lys Phe Xaa Lys Xaa Val Val  
65 70 75 80  
  
Ala Leu Leu Lys Pro Ser Arg  
85